



Michael Gibbs
Assistant Secretary for Climate Change Initiative
California Environmental Protection Agency
1001 "I" Street
Sacramento, CA 95812

September 24, 2007

Re: Comments on the Updated Macroeconomic Analysis of Climate Strategies

Dear Mr. Gibbs,

On behalf of the Natural Resources Defense Council (NRDC), we commend the Climate Action Team (CAT) for continuing to refine the economic analysis of some of the global warming solutions that will be necessary for California to achieve Assembly Bill 32's emissions limit. We appreciate the CAT's efforts to provide more detail on the economic analysis and to invite public comment on the *Updated Macroeconomic Analysis of Climate Strategies Presented in the March 2006 Climate Action Team Report* ("Report"), even as the Report notes that "additional data collection and methodological refinements are ongoing."

We commend the CAT for addressing the multiple benefits that many of the strategies provide in reducing both global warming pollution and criteria pollution. We believe it is essential that the California Air Resources Board (CARB) and the various CAT agencies use an economic framework that accurately values the strategies' multiple benefits, and we look forward to contributing to CARB's development of its economic framework during the scoping plan process over the next year.

Estimates of emission reductions are based on assumptions about what is "avoided," or what would have happened under "business as usual." We believe the Report's updated assumptions about what emissions are avoided are reasonable, albeit conservative. These updated assumptions tend to result in low reduction numbers, particularly for the electricity sector. For example, the assumption that energy efficiency in the electric sector avoids 80% efficient combined cycle natural gas-fired power and 20% renewable power results in very low estimates of avoided emissions. While we believe this assumption is generally reasonable, and largely consistent with the California Public Utilities Commission (CPUC) avoided cost framework (which assumes energy efficiency avoids efficient combined cycle natural gas-fired power), we urge the CAT to include a discussion in the report that explains the implications of these assumptions. For example, it

should be noted that this assumption for energy efficiency results in relatively small emission reductions, whereas an assumption that efficiency avoids conventional coal-fired power plants would more than double the emissions reductions associated with the strategy.

Most importantly, the emission reduction target to meet the AB 32 emissions limit must be updated to reflect the same assumptions about the business as usual forecast. The Report notes that the updated emission reductions from the strategies was compared against the 174 million metric tons of CO₂e (MMTCO₂e) reduction target that was estimated in the initial CAT report. However, we understood that the 174 MMTCO₂e reduction target was based on different assumptions; for example, we understood that it was based in part on an assumption that the business as usual forecast for the electric sector included some coal-fired power. As a result, the Report's updated assumptions would tend to decrease the emission reduction target. *It is essential that the CAT use consistent assumptions to calculate emission reductions for individual strategies and to estimate the overall AB 32 reduction target.* We urge the CAT to update the target accordingly. We understand that CARB will be developing an updated "business as usual" forecast to 2020 in October, and we look forward to participating in the public process to update the AB 32 reduction target.

Thank you for considering our comments on the CAT Report.

Sincerely,



Devra Wang
Director, California Energy Program

cc: Chuck Shulock, Program Manager for GHG Reduction, CARB